PASTURE

Successful resource management on pastureland is the correct application of a combination of practices that will meet the needs of the total pastureland ecosystem--the soil, water, air, plant, and animal resources and the objectives of the landuser.

The minimum criteria that must be met on pastureland for each of the resource criteria is explained in Section III of the Field Office Technical Guide.

In planning a Resource Management system (RMS) for pastureland, vegetation management (pasture management) is the foundation on which the RMS is built. Prescribed Grazing (proper grazing heights and timing, proper fertilization and liming, and weed control) is **ESSENTIAL** to the proper management of pastureland. A grazing management plan that balances the forage and feed to the animal numbers, describes the animal movement through the pastures, and meets the needs of the soil, water, air, plants, and animals is **ESSENTIAL** to the formulation of a RMS on pastureland. Nutrient Management and Pest Management are planned to manage the fertility and weed problems. Water for the animals of concern must be provided, thus making natural water or watering facilities **ESSENTIAL** to a pastureland RMS.

All other practices planned on pastureland are to either (1) facilitate the application of the grazing management plan, a **OPTIONAL** practice, or (2) establish, renovate, more intensively manage, or accelerate changes in the pasture, a **NEEDED** practice. These practices are planned and **NEEDED** to address site specific resource problems to meet the criteria for managing the soil, water, air, plant, and animal resources.

Resource Management Systems include a combination of practices that are:

- 1. **ESSENTIAL**: Vegetation management practices and livestock water are essential to successful management of pastureland and are always planned in the RMS.
- 2. **OPTIONAL**: These practices facilitate or enhance the essential practice (vegetative management).
- 3. **NEEDED**: These practices are planned when needed to establish, renovate, or more intensively manage the pasture, or accelerate changes in the pasture by treating specific resource problems to meet the RMS Quality Criteria.

A RMS is developed by selecting a combination of the **ESSENTIAL**, plus the **OPTIONAL** and/or **NEEDED** practices whose combined efforts will meet the criteria established for each resource (soil, writer, air, plants, and animals) and the objectives of the landuser.

PASTURE - Continued:

Practices applicable to pastureland:

• ESSENTIAL

Nutrient Management (590) Prescribed Grazing (528) Pest Management (595) Watering Facility * (614)

• OPTIONAL

Fence (382)
Forage Harvest Management (511)
Pipeline (516)
Pond (378)
Pond Sealing or Lining
Spring Development (574)
Watering Facility (614)
Water Well (642)

• NEEDED

Access Road (560)
Brush Management (314)
Critical Area Planting (342)
Diversion (362)
Grade Stabilization Structure (410)
Land Clearing (460)
Pasture and Hay Planting (512)
Prescribed Burning (338)
Streambank and Shoreline Protection (580)
Structure for Water Control (587)
Upland Wildlife Habitat Management (645)
Water and Sediment Control Basin (638)
Wetland Wildlife Habitat Management (644)
Windbreak/Shelterbelt Establishment (380)

^{*}The first water in the pasture for animal use.

PASTURELAND RESOURCE MANAGEMENT SYSTEM

Existing conditions: 100 acres, coastal bermudagrass, is in continuous use. Plants have low vigor. Area is poorly fertilized. No cool season plants are in production. Pasture is weedy. Streambank erosion is occurring from livestock during watering and grazing. Well is located in northeastern corner of pasture. Beef Cattle. 77

Option 1- Cow-Calf: A Planned Grazing System consisting of a 16-pasture short duration system is planned. Facilitating practices are planned (see map). Streambank and Shoreline Protection is planned to control streambank erosion and includes fencing pastures 5 and 14, constructing a stream crossing, and managing grazing to stabilize streambanks.

percent calf crop that has 325 lb average weaning weights. Parasites are a problem in cattle. High feed bill mainly from buying hay and protein supplement. Soil is a deep sandy loam. Neighbor's pond receiving sediment from streambank erosion. Suitable habitat for quail is a concern.

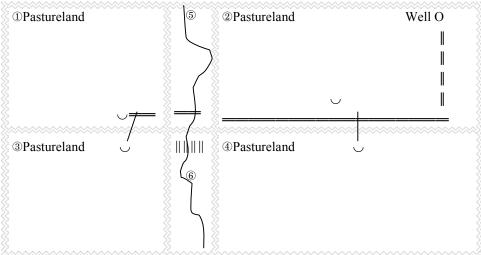
1	2	3	4	(5)	6	7	8	<pre>9well O I I</pre>
(0)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)

Soil				Wa	ater	Air]	Plant										
Resource	Ero	sion	Cone	dition	Deposition	Qua	ality	Quality	Conc	lition	Manaş	gement		Hal	oitat		Mai	nagem	ient
Problems	erosion	erosion	ion	zer &	damage - offsite	Surface water	COLIMINA	ده.	ity		harvest	pest management					Population/	balance	h – cattle
Conservation Management System Options	Sheet and rill	Streambank e	Soil compaction	Excess Fertilizer pesticides	Sediment dan	Pesticides	Nutrients	Airborne drift	Plant suitability	Productivity	Est. growth h	Nutrient & pe	Food – Cattle	Food – Quail	Cover – Quail	Water – Cattle	Cattle	Quail	Animal health
Quality Criteria Met	✓	✓	✓	✓	√	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	✓	√	✓	√
Prescribed Grazing	+	+	+	+	+	+	+	-	N/A	+	+	+	+	0	+	N/A	+	+	+
Nutrient Management	+	0	+	+	0	N/A	+	+	+	+	+	+	+	0	+	N/A	+	+	+
Pest Management	0	0	0	+	0	+	N/A	+	+	+	+	+	+	-	-	N/A	+	-	+
Fence - Electric	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	N/A	F	F	F
Pipeline	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	+	F	F	F
Watering Facility	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	+	F	F	F
Pasture Planting - Legumes	+	0	+	+	+	+	+	N/A	+	+	+	+	+	+	+	N/A	+	+	+

Pstlnd.pm4

Pastureland Resource Management System – Continuted.

Option II Cow-Calf: A Planned Grazing System consisting of a 4-pasture, one herd system is planned. Facilitating practices are planned (see map). Streambank and Shoreline Protection is planned to control streambank erosion and includes fencing pastures 5 and 6, constructing a stream crossing, and managing grazing to stabilize streambanks.

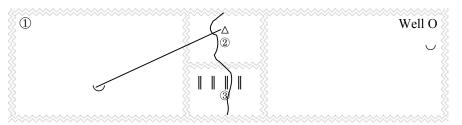


Express the effects of the selected practices as N/A, if not applicable; F = facilitating; O = no effect; + = positive effect; and - = negative effect.

	Soil						ater	Air	Plant										
Resource	Ero	sion	Cone	dition	Deposition	Qua	ality	Quality	Conc	lition	Manag	gement		Hal	oitat		Mai	nagen	ient
Problems	erosion	erosion	ion	izer &	amage - offsite	Surface water	COLIGINA		ity		harvest	pest management			1	e	Population/	balance	h – cattle
Conservation Management System Options	Sheet and rill	Streambank e	Soil compaction	Excess Fertilizer pesticides	Sediment dan	Pesticides	Nutrients	Airborne drift	Plant suitability	Productivity	Est. growth h	Nutrient & pe	Food – Cattle	Food – Quail	Cover – Quail	Water – Cattle	Cattle	Quail	Animal health
Quality Criteria Met	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	√	✓	√
Prescribed Grazing	+	+	+	+	+	+	+	-	N/A	+	+	+	+	0	+	N/A	+	+	+
Nutrient Management	+	0	+	+	0	N/A	+	+	+	+	+	+	+	0	+	N/A	+	0	+
Pest Management	0	0	0	+	0	+	N/A	+	+	+	+	+	+	-	-	N/A	+	-	+
Fence - Electric	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	N/A	F	F	F
Pipeline	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	F	F	F	F
Watering Facility	F	F	F	F	F	F	F	N/A	F	F	F	F	F	F	F	+	F	F	F
Pasture Planting - Legumes	+	0	+	+	+	+	+	N/A	+	+	+	+	+	+	+	+	F	F	F

Pastureland Resource Management System - Continued.

Option III Cow-Calf: Pasture Management consists of continuous grazing with a proper stocking rate. Streambank and Shoreline Protection is planned to control streambank erosion and includes fencing pastures 2 and 3, constructing a stream crossing, and managing grazing to stabilize streambanks.



Express the effects of the selected practices as WA, it not applicable; F = facilitating; 0. no effect; += positive effect; and -= negative effect.

	Soil						iter	Air			Plant		Î		8				
Resource	Ero	sion	Cond	dition	Deposition	Qua	ılity	Quality	Conc	dition	Manag	gement		Hal	oitat		Mai	nagen	ient
Problems	erosion	erosion	ion	izer &	amage - offsite	Surface water		ب	ity		harvest	pest management			-11	9	Population/	balance	h – cattle
Conservation Management System Options	Sheet and rill	Streambank e	Soil compaction	Excess Fertilizer pesticides	Sediment dar	Pesticides	Nutrients	Airbome drift	Plant suitability	Productivity	Est. growth h	Nutrient & pe	Food – Cattle	Food – Quail	Cover – Quail	Water – Cattle	Cattle	Quail	Animal health
Quality Criteria Met	✓	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	√
Prescribed Grazing	+	+	+	+	+	+	+	1	+	+	+	+	+1	0	+	N/A	+	+	+2
Nutrient Management	+	+	+	+	+	N/A	+	+	+	+	+	+	+	0	+	N/A	+	0	+
Pest Management	0	0	0	+	0	+	N/A	+	+	+	+	+	+	-	-	N/A	+	-	+
Fence	F	F	F	0	+	F	F	N/A	F	F	F	F	F	F	F	N/A	F	F	F
Pond		F	F	F	0	+	F	N/A	F	F	F	F	F	F	F	F	+	F	F
Pipeline	F	F	0	F	F	F	N/A	N/A	F	F	F	F	F	F	F	+	F	F	F
Watering Facility	F	F	F	0	F	F	F	N/A	F	F	F	F	F	F	F	+	F	F	F

FOTG Section III Guidance Documents

Arkansas

August 2002

¹ Protein supplement and hay must be fed during winter.
² Because of continuous grazing, producer must depend entirely on a worming program to control the internal parasite problem.